



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,851	10/30/2003	Thomas Peterffy	30894-101	9758
26486 7590 01/23/2009 BURNS & LEVINSON, LLP 125 SUMMER STREET BOSTON, MA 02110			EXAMINER SHRESTHA, BLEENDRA K	
			ART UNIT 3691	PAPER NUMBER
			MAIL DATE 01/23/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/697,851

**Applicant(s)**

PETERFFY ET AL.

**Examiner**

BIJENDRA K. SHRESTHA

**Art Unit**

3691

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/IB)  
Paper No(s)/Mail Date 10/30/2003 and 09/08/2005
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

Acknowledgement is made of applicant's claim for priority to Provisional Application 60/422,408 filed on 10/30/2002 under 35 U.S.C. 119(e).

### ***Claim Objections***

1. Claim 15 objected to because of the following informalities: Claim 15 refers to "processor" in claim 12 where claim does not recite any "processor". Examiner interprets it as a typo error and the term "processor" should be replaced by "process".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 11-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 11, 17 and 20, as best understood, it appears that the claimed method steps could simply be performed by mental process alone and are not statutory. Based on Supreme Court precedent, a proper process must be tied to another statutory class or transform underlying subject matter to a different state or thing (*Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88

(1876)). Since neither of these requirements is met by the claim, the method is not considered a patent eligible process under 35 U.S.C. 101. To qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplished the method steps or positively reciting the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madoff et al., U.S. Patent No. 7,162,448 (reference A in attached PTO-892) in view of Hauser et al., U.S. Patent No. 6,061,789 (reference B in attached PTO-892) further in view of Lutnick et al., U.S. Patent No. 6,850,907 (reference C in attached PTO-892).

As per claim 1 and 7, Madoff et al. teach a processor conducting a secondary auction for electronic trading of financial instruments (see Fig. 1, Sever (21); column 3, lines 19-23; where system 10 is facilitate trading of bonds, options, futures which examiner notes occurs in secondary auction or trading; Examiner notes products such as bonds and derivatives are traded in secondary market after primary issues. For example, newly issued treasuries enter the secondary market after U.S. government

pre-established auction and are traded typically "over-the-counter". The parties involved in the secondary trading are illustrated in Fig. 1 which includes ECNs, Broker/Dealers, Specialists, Option Makers etc) comprising:

(a) a receiver for information messages from market participants that bid for purchase or offer for sale of a financial instrument (see Fig. 1, Order Entry Side (12) and Order Response Side (14); column 3, lines 44-52), said receiver time-stamping received information messages (see Fig. 11, Time Stamp (132); column 1, lines 64-65)

(b) an electronic order book (see Fig. 1; column 4, lines 5-12; where order and response entry is stored in the server memory which Examiner interprets as an electronic order book);

(c) an updater communicating with said receiver and said electronic order book for qualifying and parsing price, size and time-stamp bid or offer data from information messages received on said receiver and entering said parsed data on said electronic order book with priority tracked by instrument in price and time-stamp of a received and qualified message (see Fig. 2, Order (30); column5, lines 26-42);

(d) a transmitter communicating with said electronic order book for display to market participants during said secondary auction anonymous data on price and quantity bid entered on said electronic order book (see column 2, lines 61-67; Fig. 9A-9C, column 9, lines 61-67 to column 10, lines 1-32, ; column 7, lines 40-48; where market participant anonymous data on price and quantity data is transmitted to the auction system 20 for display);

(e) a price improvement period timer communicating with said updater

(i) initiated upon receipt by said receiver of an information message from a qualified market participant containing a bid or offer at or better than price improvement, over the best bid or offer prevailing across multiple markets for a particular instrument (see Fig. 2; column 5, lines 53-67 to column 6, lines 1-3) and

(ii) terminated upon an elapsing of a preset price improvement period time, establishing the duration of said secondary auction, of less than a minute and commensurate with market risk (see column 6, lines 13-17); and

(f) a transaction executor communicating with said price improvement period timer and said electronic order book for allocating and executing upon said termination matches of bids or offers for said particular instrument, data for which are entered on said electronic order book, against market offers or bids in said order, subject to a partial time priority for said qualified market participant, and updating said electronic order book accordingly (see Fig. 2 to Fig. 8)).

Madoff et al. do not teach anonymity in displaying market participant data.

Hauser et al. teach anonymous bidding or auctioning in electronic commerce (Hauser et al., abstract).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to include anonymity in displaying market participant data of Madoff et al. because Hauser et al. teach including above features would enable to protect privacy of bidder, consumer or merchant (Hauser et al., column 1, lines 57-62).

Madoff et al. do not teach price improvement preset at the processor regardless of the market participant.

Lutnick et al. teach price improvement preset at the processor regardless of the market participant (Lutnick et al., Fig. 6, steps 650-700; column 12, lines 16-44; where price improvement is preset at current market in the system processor).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to include price improvement preset at the processor regardless of the market participant of Madoff et al. because Lutnick et al. teach including above features would enable to bring transaction at or close to the "market" price of goods satisfying the desires of both buyers and sellers (Lutnick et al., column 1, lines 36-38).

6. As per claim 2, Madoff et al. in view of Hauser further in view of Lutnick et al. teach claim 1 as described above. Madoff et al further teach the processor wherein

said best bid or offer prevailing across multiple markets is the best bid or offer on a national market (see Fig. 1; Fig. 3, column 6, lines 49-66).

7. As per claim 3, Madoff et al. in view of Hauser further in view of Lutnick et al. teach claim 2 as described above. Madoff et al further teach the processor wherein

said preset price improvement and increments in subsequent bids or offers during said price improvement are finer increments than those reported for best bids and offers on said national market (see Fig. 8).

8. As per claim 4, Madoff et al. in view of Hauser further in view of Lutnick et al. teach claim 2 as described above. Madoff et al further teach the processor wherein

said preset price improvement period is three seconds (see column 4, lines 55-65).

9. As per claim 5 and 8, Madoff et al. in view of Hauser further in view of Lutnick et al. teach the processor wherein

said qualified market participant is a non-market-maker broker-dealer (see column 9, lines 47-48) and said qualified market participant receives time priority for forty percent by size of any remaining allocation at said qualified market participant's best price (see column 9, lines 26-46).

10. As per claim 6 and 9, Madoff et al in view of Hauser further in view of Lutnick et al. teach the processor wherein

a market maker bidding or offering at the national best bid or offer at the commencement of said price improvement period receives time priority for one-third by size of any remaining allocation at said qualified market participant's best price after said qualified market participant's allocation at that or better price (see column 9, lines 25-46).

11. As per claim 10, Madoff et al. teach a computer program product for conducting a fast price improvement auction of financial instruments traded across national markets (see Fig. 1), said computer program product residing on a computer-readable medium comprising instructions for causing a computer to:

receive an order an order specifying the commencement of a price-improvement auction with better price than the prevailing price across national markets, commence



and conduct an auction with a time duration of greater than zero and less than ten seconds where bids or offers are matched with contra market orders or bids, displayed to auction participants during price-improvement auction period, according to an allocation at the best price first and within each price level by time of receipt, with a share of any allocation at the best price level received from a market participant commencing said price-improvement auction reserved to said market participant (see Fig.2; column 5, lines 27-42, 53-62; column 7, lines 40-48; column 10, lines 20-30).

Madoff et al. do not teach anonymity in displaying market participant data.

Hauser et al. teach anonymous bidding or auctioning in electronic commerce (Hauser et al., abstract).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to include anonymity in displaying market participant data of Madoff et al. because Hauser et al. teach including above features would enable to protect privacy of bidder, consumer or merchant (Hauser et al., column 1, lines 57-62).

Madoff et al. do not teach price improvement preset at the processor regardless of the market participant.

Lutnick et al. teach price improvement preset at the processor regardless of the market participant (Lutnick et al., Fig. 6, steps 650-700; column 12, lines 16-44; where price improvement is preset at current market price in the system processor).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to include price improvement preset at the processor regardless of the market participant of Madoff et al. because Lutnick et al. teach including above

features would enable to bring transaction at or close to the "market" price of goods satisfying the desires of both buyers and sellers (Lutnick et al., column 1, lines 36-38).

12. As per claim 11 and 17, Madoff et al. teach a process for conducting a secondary auction electronic trading of financial instruments (see Fig. 1; column 3, lines 19-23; where system 10 is facilitate trading of bonds, options, futures which examiner notes occurs in secondary auction or trading) comprising the steps of:

(a) receiving an information message that bids for purchase of or offers for sale a financial instrument ; (b) entering on an electronic order book data parsed from said information message where said information message bids for purchase of or offers for sale a financial instrument at price at or better than a price improvement, over the best national bid or offer, wherein price and quantity information are visible to market participants during said secondary auction; (c) initiating a price improvement period timer upon receipt of the first said bid or offer at or better than said preset price improvement (see Fig. 2; column 5, lines 26-34; column 10, lines 20-30);

(d) receiving and information messages and entering according to steps (a) and (b) until the elapsing of a preset price improvement period time; (see Fig. 2; column 5, lines 43-59);

(e) allocating and executing, upon the said elapsing of said preset price improvement period time, matches of bids or offers for a particular equity option contract, data for which are entered on said electronic order book, in order of best bids or offers and earliest time of receipt at each price level, against market offers or bids,

subject to a partial time priority for a qualified market participant from whom was received said information message initiating said price improvement period timer (see Fig. 2; column 5, lines 59-67 to column 6, lines 1-12).

Madoff et al. do not teach price improvement preset at the processor regardless of the market participant.

Lutnick et al. teach price improvement preset at the processor regardless of the market participant (Lutnick et al., Fig. 6, steps 650-700; column 12, lines 16-44; where price improvement is preset at current market in the system processor).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to include price improvement preset at the processor regardless of the market participant of Madoff et al. because Lutnick et al. teach including above features would enable to bring transaction at or close to the "market" price of goods satisfying the desires of both buyers and sellers (Lutnick et al., column 1, lines 36-38).

13. As per claim 12, Madoff et al. in view of Hauser further in view of Lutnick et al. teach claim 11 as described above. Claim 12 is rejected under same rational as claim 2 described above.

14. As per claim 13, Madoff et al. in view of Hauser further in view of Lutnick et al. teach claim 12 as described above. Claim 13 is rejected under same rational as claim 3 described above.

15. As per claim 14, Madoff et al. in view of Hauser further in view of Lutnick et al. teach claim 13 as described above. Claim 14 is rejected under same rational as claim 4 described above.

16. Claims 15 and 18 are rejected under same rational as claim 5 described above.
17. Claim 16 and 19 are rejected under same rational as claim 6 described above.

18. As per claim 20, Madoff et al. teach a method for conducting a fast price improvement auction of financial instruments traded across national markets (see Fig. 1, ECN, Internet) comprising the steps of:

receiving an order from a qualified market participant specifying the commencement of a price-improvement auction with better price, by greater than a threshold preset for all said auctions, than the prevailing price across national markets (see Fig. 2; column 5, lines 27-36)

commencing an auction with a time duration of greater than zero and less than ten seconds in which improved bids or offers are received, displayed to auction participants during price-improvement auction period (see Fig. 2; column 5, lines 32-42; column 7, lines 40-48; column 10, lines 25-30); and

at the termination of said auction, mating with contra market orders or bids according to an allocation at the best price first and within each price level by time of receipt, with a share of any allocation remaining at the best price level of said market participant commencing said price-improvement auction reserved to said market participant (see Fig. 2; column 5, lines 53-67 to column 6, lines 1-12).

Madoff et al. do not teach anonymity in displaying market participant data.

Hauser et al. teach anonymous bidding or auctioning in electronic commerce (Hauser et al., abstract).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to include anonymity in displaying market participant data of Madoff et al. because Hauser et al. teach including above features would enable to protect privacy of bidder, consumer or merchant (Hauser et al., column 1, lines 57-62).

Madoff et al. do not teach price improvement preset at the processor regardless of the market participant.

Lutnick et al. teach price improvement preset at the processor regardless of the market participant (Lutnick et al., Fig. 6, steps 650-700; column 12, lines 16-44; where price improvement is preset at current market in the system processor).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to include price improvement preset at the processor regardless of the market participant of Madoff et al. because Lutnick et al. teach including above features would enable to bring transaction at or close to the "market" price of goods satisfying the desires of both buyers and sellers (Lutnick et al., column 1, lines 36-38).

### ***Conclusion***

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosures. The following are pertinent to current invention, though not relied upon:

Allen et al.(U.S. Pub No. 2002/0138401) teach method and system for automatic execution of a securities transaction.

Fraser et al. (U.S. Pub No. 2004/0210512) teach system and method for trading.

Gary (U.S. Patent No. 6,618,707) teaches automated exchange for trading derivative securities.

Hanley et al. (U.S. Pub No. 2003/0158806) teach automated raked bid sales method and system.

Keith (U.S. Pub No. 2001/0042040) teaches routing control for orders eligible for multiple markets.

Klein (U.S. Pub No. 2002/0194105) teaches process of and system for trading securities and option and markets related thereto.

Lutnick et al. (U.S. Patent No. 6,850,907) teach automated price improvement protocol processor.

Gamber et al. (U.S. Pub No. 2003/0177086) teach integrated order pre-matching system.

Madoff et al. (U.S. Patent No. 7,099,839) teach opening price process for trading system.

Sweeting (U.S. Pub No. 2006/0229967) teaches system and method for providing price improvement in an active trading market

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bijendra K. Shrestha whose telephone number is (571) 270-1374. The examiner can normally be reached on 7:00 AM-4:30 PM (Monday-Friday); 2nd Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on (571) 272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alexander Kalinowski/  
Supervisory Patent Examiner, Art  
Unit 3691

bks/3691